Table WEB-1: DnHP, Developmental Toxicity, Mice

Species, Strain, and	Experimental Regimen	Number	Dose*	Maternal effects	Offspring Effects
Source					
CD-1 Mice	Prenatal developmental toxicity	50	0		
	screening study. Pregnant dams				
Hardin et al.	were gavaged with DnHP	48	9,900	Could not be evaluated.	No live pups at birth.
1987	(undiluted) from gd 6–13. Dams				
(1)	were observed twice daily and				
	weighed on gd 6, gd 17, and pnd 3.				
	Pups were delivered and nursed				
	until pnd 3. Dams were killed on				
	pnd 3 and the uteri of females that				
	did not deliver were stained with				
	ammonium sulfide to examine				
	implantation sites. Developmental				
	parameters evaluated in pups				
	included body weight and survival.				

<sup>\*</sup>Doses measured in mg/kg bw/day.

Table WEB-2: DnHP, Reproductive Toxicity, Mice

Species,		Animal		
Strain, and Source	Experimental Regimen	Number	Dose*	Effects
CD-1 Mice	Fertility assessment through continuous breeding study.	37	0	37/37 pairs fertile.
Lamb 1987; Reel et al. 1985 (2, 3)	DnHP administered in feed at 0, 0.3, 0.6, or 1.2%. Breeding pairs housed together for 98 days; body weight was measured on 6 days, clinical signs and food intake were recorded; litters were counted, sexed, weighed, and removed following birth.	17 19 16	380 800 1,670	14/17 pairs fertile.  ↓ Litters/pair (n=3.43 vs. 4.89 in control).  ↓ Live pups/litter (n=3.43 vs. 12.29 in control).  ↑ Pup mortality.  1/19 pairs fertile.  0/16 pairs fertile.
	In a crossover breeding study, high-dose males and females were mated with control mice.  Breeding pairs were housed together for 7 days or until a copulatory plug was observed. Necropsy and a histopathological examination were conducted			Cross-over mating trial  ↓ Mating rate in males. Females normal.  ↓ Fertility in exposed males x control females, 6 vs. 85%.  ↓Fertility in exposed females x control males, 0 pairs fertile.  ↓ Sperm count and motility in F <sub>0</sub> males.  ↓ Testis, epididymis, and seminal vesicle to body weight ratios.  ↑ Liver to body weight ratio in F <sub>0</sub> males and females.  ↓ Body weight in F <sub>0</sub> males and females.

<sup>\*</sup>Doses (in mg/kg bw/day) estimated by Chapin and Sloane (4). N = Number

↑=Statistically Significant Increase

↓=Statistically Significant Decrease

## REFERENCES

- 1. Hardin BD, Schuler RL, Burg JR, Booth GM, Hazelden KP, MacKenzie KM, Piccirillo VJ, Smith KN. Evaluation of 60 chemicals in a preliminary developmental toxicity test. Teratogen Carcinogen Mutagen 7:29-48(1987).
- 2. Lamb JC, IV. Reproductive effects of four phthalic acid esters in the mouse. Toxicol Appl Pharmacol 88:255-269(1987).
- 3. Reel JR, Lawton AD, Myers CB. Di-N-Hexyl Phthalate: Reproduction and fertility assessment in CD-1 mice when administered in the feed. NTP-85-187. NTIS#PB85-249332: National Toxicology Program, National Institute of Environmental Health Sciences, 1985.
- 4. Chapin RE, Sloane RA. Reproductive assessment by continuous breeding: Evolving study design and summaries of ninety studies. Environmental Health Perspectivews 105:199(1997).